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REMARKS

Claims 1-2, 4-9, 11-16, 18-28, and 30-33, all the claims pending in the application, stand rejected on prior art grounds. Applicants respectfully traverse these rejections based on the following discussion.

I. The Prior Art Rejections

Claim 26 stands rejected under 35 U.S.C. §102(e) as being anticipated by Sangudi, et al. (U.S. Patent No. 6,925,470), hereinafter referred to as Sangudi. Claims 1-2, 5-9, 12-15, 19, 21, 27-28, and 31-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sangudi, in view of Schloss, et al. (U.S. Patent No. 6,249,844), hereinafter referred to as Schloss. Claims 4, 11, 18, and 30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sangudi, in view of Schloss and Cox (U.S. Publication No. 2002/0112224). Claims 16 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sangudi, in view of Mani, et al. (U.S. Publication No. 2003/0212698), hereinafter referred to as Mani. Applicants respectfully traverse these rejections based on the following discussion.

The claimed invention provides a method of transferring data from a markup language file having a hierarchical structure to a relational database. Applicants' respectfully traverse the rejections because neither Sangudi nor Schloss mention repeating leaf nodes; and therefore, the proposed combination of Sangudi and Schloss cannot teach partitioning a hierarchical structure into sections based on such repeating leaf nodes. Rather, Sangudi and Schloss only disclose non-repeating leaf nodes. Moreover, Sangudi teaches grouping objects into chunks based on

“member type”. Therefore, as explained in greater detail below, Applicants respectfully submit that the prior art of record does not teach or suggest the claimed invention.

Applicants respectfully traverse the rejections because the proposed combination of Sangudi and Schloss fails to teach partitioning a hierarchical structure into sections, comprising placing a partition boundary at each end of each repeating node. Such features are defined in independent claims 1, 8, 15, 26, and 27 using similar language.

More specifically, as discussed in paragraph 0043 of Applicants’ disclosure, FIGS. 4A and 4B illustrate the results of the partitioning process of the invention on the frontier of the hierarchical data structures of FIGS. 3A and 3B. *The partitioning process places a partition boundary at each end of the scope on the frontier of each repeating node.* As shown in FIGS. 3A and 4A, the scope of the repeating root A is the entire frontier so boundaries are placed at both ends. (These boundaries are optional because they do not separate any frontier nodes.) The scope of repeating branch node B is the set of nodes from E to H, so boundaries are placed at the end to the left of E and between H and I. The scope of repeating leaf node G is just the node G so boundaries are placed between F and G and between G and H. Likewise the scope of repeating node I is node I and the scope of repeating node K is node K, so boundaries are placed between H and I, between I and J, between J and K, and between K and L. FIGS. 3B and 4B illustrate that the invention first places boundaries before M and after G. Boundaries are also placed before and after repeating I and K nodes. Similarly, repeating node G is provided its own section with additional boundaries. Adjacent boundaries are replaced by one boundary, producing the sections of FIGS. 4A and 4B. Once these sections have been created, the process of partitioning the

hierarchical data structure is completed and the parsing process of transferring the data to these sections can begin.

To the contrary, nothing within Sangudi or Schloss mentions *repeating leaf nodes*. Instead, the cited references only disclose non-repeating leaf nodes. For example, as illustrated in Figures 8, 9 and 13 in Sangudi, none of the leaf nodes (i.e., "Patrick", "1907", "Fitness", "Doughnuts", "Pizza", "Beer", and "Manager") are repeating.

Therefore, in regards to Sangudi (which the Office Action asserts discloses partitioning a hierarchical structure into sections (Office Action, p. 3, item 10)), leaf nodes are not grouped together based on whether or not they repeat. Instead, the objects of Sangudi are grouped into "chunks" wherein, as described in column 6, lines 34-45, a chunk may be viewed as an array of member type objects. Thus, for example, referring to FIG. 13, one chunk (Chunk 1) may be considered the Employee node with the type (=Manager in this Figure), a second chunk (Chunk 2) may be considered the node Name with the text value (Patrick), and a third chunk (Chunk 3) may be the node Diet and all that is below it (Breakfast, Lunch, Dinner and the respective text values). As can be seen the three different chunks vary in size and vary in what they represent and in what data they may have.

Accordingly, it is Applicants' position that neither Sangudi nor Schloss mention repeating leaf nodes; and therefore, the proposed combination of Sangudi and Schloss cannot teach partitioning a hierarchical structure into sections based on such repeating leaf nodes. Rather, Sangudi and Schloss only disclose non-repeating leaf nodes. Moreover, Sangudi teaches grouping objects into chunks based on "member type". As such, Applicants submit that the proposed combination of Sangudi and Schloss fails to teach or suggest the claimed feature

“wherein said partitioning of said hierarchical structure comprises placing a partition boundary at each end of each repeating node” as defined by independent claims 1, 8, 15, and 27, or “partitioning said hierarchical structure into sections, comprising placing a partition boundary at each end of each repeating node” as defined by independent claim 26.

In addition, Applicants submit that the cited prior art fails to teach or suggest the claimed feature of “[a] method of altering the hierarchical structure of a markup language file for being processed into a relational database, said method comprising: identifying repeating nodes and non-repeating nodes within said hierarchical structure; and reorganizing said hierarchical structure such that non-repeating nodes are positioned before repeating nodes within each hierarchal level of said hierarchical structure” (independent claim 22). As discussed above, nothing within Sangudi or Schloss mentions repeating leaf nodes. Instead, the cited references only disclose non-repeating leaf nodes. Furthermore, Applicants submit that independent claim 22 has not been rejected by the Office Action under either 35 U.S.C § 102 or 35 U.S.C § 103.

Office Action argues that Sangudi discloses a method comprising, after completing said partitioning and allocating, parsing said markup language file to produce a stream of data pairs, wherein each of said data pairs comprises an element of node data and an element of node location information (Office Action, p. 4, item 13). Such features are defined in independent claims 1, 8, 15, and 27 using identical language.

In support for its contention, the Office Action cites Figure 10 of Sangudi, which illustrates an array including two columns for node data, wherein “attribute” data is separate from “tag value” data. Further, numerous columns are also provided for indicating node

location, wherein the node IDs are named in various relationships with the node covered by a particular row.

However, individual row data in Figure 10 cannot be converted into a data pair of the claimed invention without rebuilding the hierarchical structure using other rows. Figure 10 does not disclose construction of data pairs or a process for converting the entire array into a set of data pairs.

To the contrary, as discussed in paragraph 0024 of Applicants' disclosure, after completing the partitioning, the invention then parses the actual data contained in the hierarchical data file to produce a stream of data pairs and end of section indicators. The data pairs are only the leaf nodes of the hierarchical file. The parsing process relocates the position of all data in the hierarchical file to the leaf nodes of the hierarchical file corresponding to leaf nodes of the hierarchical data structure. Each of the data pairs is in the form (tag, field). The "field" represents leaf node data and the "tag" represents the location of the corresponding leaf node within the hierarchical data structure.

Applicants submit that, contrary to the position taken in the Office Action, Sangudi fails to disclose producing data pairs having an element of node data and an element of node location information. Sangudi merely teaches an array of individual row data; however, a process for converting the entire array into a set of data pairs is not disclosed. Therefore, it is Applicants' position that the proposed combination of Sangudi and Schloss fails to teach or suggest the claimed feature "after completing said partitioning and allocating, parsing said markup language file to produce a stream of data pairs, wherein each of said data pairs comprises an element of

node data and an element of node location information" as defined by independent claims 1, 8, 15, and 27.

Therefore, it is Applicants' position that the proposed combination of Sangudi and Schloss does not teach or suggest many features defined by independent claims 1, 8, 15, 22, 26, and 27 and that such claims are patentable over the prior art of record. Further, it is Applicants' position that dependent claims 2, 4-7, 9, 11-14, 16, 18-21, 23-25, 28, and 30-33 are similarly patentable, not only because of their dependency from a patentable independent claims, but also because of the additional features of the invention they defined. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

II. Formal Matters and Conclusion

With respect to the rejections to the claims, the claims have been amended, above, to overcome these rejections. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the claims.


In view of the foregoing, Applicants submit that claims 1-2, 4-9, 11-16, 18-28, and 30-33, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to

discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

Dated: 10/10/06


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